

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) ~~An electronic device~~ A computer readable storage medium storing ~~electronic device~~ computer executable instructions ~~for managing that when executed on a~~ processor manage a graphical interface, the medium ~~comprising~~ storing:

instructions for providing a graphical interface, a hardware device and a software device being accessible through the graphical interface, the software device being accessible to a computer;

instructions for providing at least one interactive hardware object accessible to said the ~~electronic device~~ computer, where the hardware object represents a the hardware device and is depicted in ~~said the~~ the graphical interface, the hardware object ~~configured to be interactive~~ interacting with ~~said the~~ the hardware device ~~and to enable communication between said graphical interface and said hardware device;~~

instructions for providing ~~at least one of the group of~~ a software object ~~and an analysis object~~, wherein ~~said the~~ the software object is representative of a the software device ~~accessible to said electronic device~~, where the software object is depicted in ~~said the~~ the graphical interface and is configured to be interactive with ~~said the~~ the software device ~~and to enable communication between said graphical interface and said software device;~~

~~wherein said hardware device and said software device are accessible through the graphical interface;~~

~~wherein said analysis object is adapted to communicate with at least one of said hardware object and said software object for analysis of data from at least one of said hardware object and said software object; and~~

instructions for receiving, from a user, a plurality of configurations of the hardware object or the software object, each configuration allowing the user to edit at least one property of the hardware object or the software object; and

instructions for displaying ~~said hardware object and said the software object to a user, the plurality of configurations simultaneously.~~

2. (Canceled)

3. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, ~~wherein providing at least one of the group of a software object and an analysis object further comprising provides providing~~ an analysis object, wherein said analysis object is adapted to communicate with at least one of said hardware object and said software object for analysis of data from at least one of said hardware object and said software object.

4. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:
instructions for receiving code for execution by ~~said~~ the hardware object.

5. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, wherein a plurality of hardware objects are provided for a single hardware device.

6. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, wherein a plurality of hardware objects are provided for a plurality of hardware devices.

7. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:
instructions for scanning for available hardware; and
instructions for creating an additional hardware object for each hardware device detected and not already associated with a hardware object.

8. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 7, wherein instructions for scanning involves instructions for receiving user-defined commands to be sent to ~~said~~ the hardware device to attempt to identify ~~said~~ the hardware device.

9. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim ~~4~~ 3, wherein ~~said~~ the analysis object filters data.

10. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim ~~4~~ 3, wherein ~~said~~ the analysis object plots data.

11. (Canceled)

12. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, wherein at least one of instructions for providing at least one hardware object and providing at least one software object further comprises instructions for accessing at least one of a hardware object and a software object located on a remote computer ~~electronic device~~.

13. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 12, wherein instructions for accessing is performed through a web page.

14. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 12, wherein instructions for accessing is performed over a network.

15. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 14, wherein instructions for accessing is performed by passing commands over ~~said~~ the network in a MATLAB environment.

16. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:

instructions for modifying at least one of ~~said~~ the hardware object and ~~said~~ the software object.

17. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 16, wherein modifying specifies a protocol for use by ~~said~~ the hardware object for communication with ~~said~~ the hardware device.

18. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 16, wherein modifying modifies a value stored in an array of an array-based environment.

19. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:

instructions for modifying a value stored in an array of an array-based environment, thereby modifying at least one of ~~said~~ the hardware object and ~~said~~ the software object.

20. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:

instructions for exporting data from ~~said~~ the graphical interface to an array-based environment.

21. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:

instructions for converting user actions with the graphical interface into code.

22. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 21, wherein the code is created in a MATLAB environment.

23. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 21, wherein the code comprises steps to create an analysis object, configure the analysis object and write and read data from the analysis object.

24. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 21, wherein the code comprises an analysis routine.

25. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, wherein ~~said~~ the graphical interface is implemented with an extensible API.

26. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:

instructions for generating an analysis object so that the analysis object can be used in MATLAB.

27. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, further comprising:

instructions for generating an analysis object that can be used in SIMULINK.

28. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, wherein ~~said the~~ graphical interface is adapted to operate on a plurality of operating systems.

29. (Currently Amended) The ~~electronic device~~ computer readable storage medium of claim 1, wherein ~~said the~~ graphical interface comprises a tree view, wherein ~~said the~~ tree view groups ~~said the~~ hardware objects and ~~said the~~ software objects by a functionality characteristic.

30. (Currently Amended) A method for managing an interface, ~~said the~~ method comprising:
providing a graphical interface, a hardware device and a software device being accessible through the graphical interface, the software device being accessible to a computer;
providing at least one hardware object accessible to ~~said the~~ electronic device computer, where the hardware object represents a the hardware device and is depicted in ~~said the~~ graphical interface, the hardware object configured to be interactive with ~~said the~~ hardware device and to enable communication between ~~said the~~ graphical interface and ~~said the~~ hardware device;
providing at least one software object, representative of a the software device accessible to ~~said electronic device~~, where the software object is depicted in ~~said the~~ graphical interface, and is configured to be interactive with ~~said the~~ software device and to enable communication between ~~said the~~ graphical interface and ~~said the~~ software device;
~~wherein said hardware device and said software device are accessible through the graphical interface;~~
the graphical interface being updated in response to a change in the hardware object or the software object; and
displaying ~~said the~~ hardware objects and ~~said the~~ software objects to a user.

31. (Currently Amended) The method of claim 30, further comprising:
receiving code for execution by ~~said the~~ hardware object.

32. (Currently Amended) The method of claim 30, wherein ~~a plurality of~~ at least one additional hardware objects ~~are~~ is provided for a ~~single~~ the hardware device.

33. (Currently Amended) The method of claim 30, wherein ~~a plurality of~~ additional hardware objects are provided for a plurality of hardware devices.

34. (Previously Presented) The method of claim 30, further comprising:
scanning for available hardware; and
creating a hardware object for each hardware device detected and not already associated with a hardware object.

35. (Currently Amended) The method of claim 34, wherein scanning involves the step of receiving user-defined commands to be sent to ~~said~~ the hardware device to attempt to identify ~~said~~ the hardware device.

36. (Currently Amended) The method of claim 30, further comprising:
providing an analysis object adapted to communicate with at least one of ~~said~~ the hardware object and ~~said~~ the software object.

37. (Canceled)

38. (Currently Amended) The method of claim 30, wherein at least one of providing at least one hardware object and providing at least one software object further comprises accessing at least one of a hardware object and a software object located on a remote ~~electronic device~~ computer.

39. (Currently Amended) The method of claim 30, further comprising:
modifying at least one of ~~said~~ the hardware object and ~~said~~ the software object.

40. (Currently Amended) The method of claim 39, wherein modifying specifies a protocol for use by ~~said~~ the hardware object for communication with ~~said~~ the hardware device.

41. (Previously Presented) The method of claim 39, wherein modifying modifies a value stored in an array of an array-based environment.

42. (Previously Presented) The method of claim 30, further comprising generating an analysis object that can be used in MATLAB.

43. (Previously Presented) The method of claim 30, further comprising generating an analysis object that can be used in SIMULINK.

44. (Currently Amended) ~~In an electronic device, a system for managing interfaces, A~~
computing device comprising:

a storage medium for storing and a processor for processing:

a graphical interface, at least one hardware device and one software device being accessible through the graphical interface;

~~at least one~~ a plurality of hardware objects accessible to ~~said the electronic device computer~~, where ~~the~~ each of the hardware objects represents a hardware device and is depicted in ~~said the graphical interface~~, ~~the each~~ hardware object configured to be interactive with ~~said the hardware device and to enable communication between said the graphical interface and said the hardware device;~~

~~at least one~~ a plurality of software objects, each representative of a software device accessible to ~~said the electronic device computer~~, where ~~the~~ each of the software objects is depicted in ~~said the graphical interface~~ and is configured to be interactive with ~~said the software device and to enable communication between said the graphical interface and said the software device; and~~

~~wherein said hardware device and said software device are accessible through the graphical interface; and~~

a display device to display the plurality of said hardware objects and the plurality of said software objects and at least one configuration of one of the hardware objects or one of the software objects to a user in a single graphical interface.

45. (Currently Amended) The ~~system~~ computing device of claim 44, wherein ~~said the~~ system receives code for execution by ~~said the~~ hardware objects.

46. (Currently Amended) The ~~system~~ computing device of claim 44, wherein a plurality of hardware objects are provided for a single hardware device.

47. (Currently Amended) The ~~system~~ computing device of claim 44, wherein a plurality of hardware objects are provided for a plurality of hardware devices.

48. (Currently Amended) The ~~system~~ computing device of claim 44, wherein ~~said the~~ processor ~~system~~ scans for available hardware, and creates a hardware object for each hardware device detected and not already associated with a hardware object.

49. (Currently Amended) The ~~system~~ computing device of claim 48, wherein ~~said system the~~ processor scans by receiving user-defined commands to be sent to ~~said the~~ hardware device to attempt to identify ~~said the~~ hardware device.

50. (Currently Amended) The ~~system~~ computing device of claim 44, wherein an analysis object is provided adapted to communicate with at least one of ~~said the~~ hardware objects and ~~said the~~ software objects.

51. (Canceled)

52. (Currently Amended) The ~~system~~ computing device of claim 44, wherein at least one of ~~a the~~ hardware objects and ~~a the~~ software objects are located on a remote ~~electronic device~~ computer.

53. (Currently Amended) The ~~system~~ computing device of claim 44, at least one of ~~said the~~ hardware objects and ~~said the~~ software objects are modified by the ~~system~~ processor.

54. (Currently Amended) The ~~system~~ computing device of claim 44, wherein at least one of ~~said the~~ hardware objects and ~~said the~~ software objects are modified by the ~~system~~ processor such that a protocol is specified for use by ~~said the~~ at least one of the hardware objects for communication with ~~said the~~ hardware device.

55. (Currently Amended) The ~~system~~ computing device of claim 44, wherein at least one of ~~said the~~ hardware objects and ~~said the~~ software objects are modified by the ~~system~~ processor such that a value is stored in an array of an array-based environment.

56. (New) The medium of claim 1, wherein the hardware object enables communication between the graphical interface and the hardware device, and the software object enables communication between the graphical interface and the software device.

57. (New) The method of claim 30, wherein the hardware object enables communication between the graphical interface and the hardware device, and the software object enables communication between the graphical interface and the software device.

58. (New) The computing device of claim 44, wherein the hardware object enables communication between the graphical interface and the hardware device, and the software object enables communication between the graphical interface and the software device.

59. (New) A computer readable storage medium storing computer executable instructions that when executed on a processor manage a graphical interface, the medium storing:

instructions for providing a graphical interface, at least one hardware device and one software device being accessible through the graphical interface, the graphical interface being updated in response to a change in the hardware device or the software device;

instructions for providing a plurality of hardware objects accessible to the computer, where each of the hardware objects represents a hardware device and is depicted in the graphical interface, each hardware object configured to be interactive with the hardware device;

instructions for providing a plurality of software objects, each representative of a software device accessible to the computer, where each of the software objects is depicted in the graphical interface and is configured to be interactive with the software device;

instructions for receiving, from a user, a plurality of configurations of the hardware object or the software object, each configuration allowing the user to edit at least one property of the hardware object or the software object; and

instructions for displaying the plurality of hardware objects and the plurality of software objects and at least one of the plurality of configurations of one of the hardware objects or one of the software objects to a user in a single graphical interface.